

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Thomas M. Jessell et al.  
Serial No.: Not Yet Known (continuation of U.S. Serial No.  
08/065,844, filed May 20, 1993)  
Filed : November 2, 2001  
For : CLONING, EXPRESSION AND USES OF DORSALIN-1

1185 Avenue of the Americas  
New York, New York 10036  
November 2, 2001

Assistant Commissioner for Patents  
Washington, D.C. 20231  
Attn: Box Patent Applications

SIR:

PRELIMINARY AMENDMENT

Please amend the subject application as follows:

In the specification:

Please amend the specification under the provisions of 37 C.F.R.  
§1.121(b)(1) as follows.

On page 1, line 2, after the Title and before the Background of  
the Invention, please insert the following paragraph:

--This application is a continuation of U.S. Serial No.  
08/065,844, filed May 20, 1993, the contents of which are hereby  
incorporated by reference into the present application.--

In the claims:

Please cancel claims 1-16, 18, 21 and 28-35 without prejudice or  
disclaimer to applicants' right to pursue the subject matter of  
these claims in a later-filed application.

Also, please amend claims 17, 19-20, 22-27 and 36-40 under the  
provisions of 37 C.F.R. §1.121(c)(1) as follows. A version of the

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amended claims marked up to show the changes relative to the previous version thereof is attached hereto as **Exhibit A**. In addition, please add new claims 41-48 as follows.

- 17. (Amended) An isolated dorsalin-1 polypeptide comprising continuous amino acids, the sequence of which is set forth in SEQ ID NO:2.--
- 19. (Amended) An isolated dorsalin-1 polypeptide comprising continuous amino acids, the sequence of which is set forth in SEQ ID NO:9.--
- 20. (Amended) A method for stimulating neural crest cell differentiation comprising contacting a neural crest cell with a composition, which composition comprises an amount of the isolated dorsalin-1 polypeptide of claim 17 or 19 effective to stimulate neural crest cell differentiation, so as to thereby stimulate neural crest cell differentiation.--
- 22. (Amended) A method for regenerating nerve cells in a subject comprising administering to the subject a composition, which composition comprises an amount of the isolated dorsalin-1 polypeptide of claim 17 or 19 effective to regenerate nerve cells, so as to thereby regenerate nerve cells in the subject.--
- 23. (Amended) A method for promoting bone growth in a subject comprising administering to the subject a composition, which composition comprises an amount of the isolated dorsalin-1 polypeptide of claim 17 or 19 effective to promote bone growth, so as to thereby promote bone growth in the subject.--
- 24. (Amended) A method for promoting wound healing in a

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subject comprising administering to the subject a composition, which composition comprises an amount of the isolated dorsalin-1 polypeptide of claim 17 or 19 effective to promote wound healing, so as to promote wound healing in the subject.--

- 25. (Amended) A method for treating a neural tumor in a subject comprising administering to the subject a composition, which composition comprises an amount of the isolated dorsalin-1 polypeptide of claim 17 or 19 effective to inhibit tumor cell growth, so as to thereby treat the neural tumor in the subject.--
- 26. (Amended) The method of claim 25, wherein the neural tumor is a neurofibroma.--
- 27. (Amended) The method of claim 25, wherein the neural tumor is a Schwann cell tumor.--
- 36. (Amended) An antibody capable of specifically binding to the isolated dorsalin-1 polypeptide of claim 17 or 19.
- 37. (Amended) The antibody of claim 36, wherein the antibody is a monoclonal antibody.
- 38. (Amended) The antibody of claim 36, wherein the antibody is capable of inhibiting the biological activity of dorsalin-1 polypeptide.--
- 39. (Amended) A method for inhibiting the activity of dorsalin-1 polypeptide in a subject comprising administering to the subject an amount of the antibody of claim 38 effective to inhibit the the activity of dorsalin-1, so as to thereby inhibit the the acitivity

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of dorsalin-1 polypeptide.--

- 40. (Amended) A pharmaceutical composition for inhibiting the activity of dorsalin-1 polypeptide comprising an amount of the antibody of claim 38 effective to inhibit the activity of dorsalin-1 polypeptide and a pharmaceutically acceptable carrier.--
- 41. (New) A pharmaceutical composition comprising the isolated dorsalin-1 polypeptide of claim 17 or 19 and a pharmaceutically acceptable carrier.--
- 42. (New) The pharmaceutical composition of claim 41, wherein the pharmaceutical composition comprises an amount of isolated dorsalin-1 polypeptide effective to stimulate neural crest cell differentiation.--
- 43. (New) The pharmaceutical composition of claim 41, wherein the pharmaceutical composition comprises an amount of isolated dorsalin-1 polypeptide effective to regenerate a nerve cell in a subject.--
- 44. (New) The pharmaceutical composition of claim 41, wherein the pharmaceutical composition comprises an amount of isolated dorsalin-1 polypeptide effective to promote bone growth in a subject.--
- 45. (New) The pharmaceutical composition of claim 41, wherein the pharmaceutical composition comprises an amount of isolated dorsalin-1 polypeptide effective to promote wound healing in a subject.--
- 46. (New) The pharmaceutical composition of claim 41, wherein the pharmaceutical composition comprises an amount of isolated dorsalin-1 polypeptide effective to

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inhibit neural tumor cell growth in a subject.--

--47. (New) The pharmaceutical composition of claim 46,  
wherein the neural tumor is a neurofibroma.--

--48. (New) The pharmaceutical composition of claim 46,  
wherein the neural tumor is a Schwann cell tumor.--

### Remarks

Claims 1-40 were pending in the subject application. Applicants have hereinabove canceled claims 1-16, 18, 21 and 28-35 without prejudice or disclaimer to their right to pursue the subject matter of these claims in a later-filed application, amended claims 17, 19-20, 22-27 and 36-40 and added new claims 41-48. Support for these amendments may be found inter alia in the specification as follows: claim 17: originally filed claim 17; page 24, lines 2-4 and 9-10; claim 19: originally filed claim 19; page 24, lines 2-4 and 9-10; claim 20: originally filed claim 20; page 24, lines 2-4; claim 21: originally filed claim 21; page 24, lines 2-4; claim 22: originally filed claim 22; page 24, lines 2-4; claim 23: originally filed claim 23; page 24, lines 2-4; claim 24: originally filed claim 24; page 24, lines 2-4; claim 25: originally filed claim 25; page 24, lines 2-4; claim 26: originally filed claim 26; claim 27: originally filed claim 27; claim 28: originally filed claim 28; page 24, lines 2-4; claim 29: originally filed claim 29; page 24, lines 2-4; claim 30: originally filed claim 30; page 24, lines 2-4; claim 31: originally filed claim 31; page 24, lines 2-4; claim 32: originally filed claim 32; page 24, lines 2-4; claim 33: originally filed claim 33; claim 34: originally filed claim 34; claim 36: originally filed claim 36; page 24, lines 2-4; claim 37: originally filed claim 37; claim 38: originally filed claim 38; claim 39: originally filed claim 39; claim 40: originally filed claim 40; claim 41: originally filed claims 28-32 and 40;

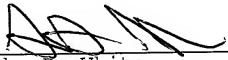
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claim 42: originally filed claim 28; claim 43: originally filed claim 29; claim 44: originally filed claim 30; claim 45: originally filed claim 31; claim 46: originally filed claim 32; claim 47: originally filed claim 33; claim 48: originally filed claim 34. The remaining changes to the claims merely introduce minor grammatical and format changes. Accordingly, claims 17, 19-20, 22-27 and 36-48 involve no issue of new matter and entry of this amendment is respectfully requested such that claims 17, 19-20, 22-27 and 36-48 will be pending.

If a telephone interview would be of assistance in advancing prosecution of the subject application, applicants' undersigned attorneys invite the Examiner to telephone either of them at the number provided below.

No fee, in addition to the \$708.00 filing fee, is deemed necessary in connection with the filing of this Preliminary Amendment. However, if any additional fee is required, authorization is hereby given to charge the amount of any such fee to Deposit Account No. 03-3125.

Respectfully submitted,

  
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